APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,317	12/29/2000	Robert Walter Schreiber	52817.000123	6993

29315 7590 03/08/2004	EXAMINER
MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC	VEILLARD, JACQUES

12010 SUNSET HILLS ROAD	ART UNIT	PAPER NUMBER
SUITE 900	---	---
RESTON, VA 20190	2175	

DATE MAILED: 03/08/2004   17

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)
Office Action Summary	09/750,317		SCHREIBER, ROBERT WALTER
	Examiner		Art Unit
	Jacques Veillard		2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 December 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-43</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-43</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the Applicant's amendment filed on 12/4/2003.

2.   Claims 1, 2, 11 12, 21, 22 31 and 32 have been amended, and claims 41-43 have been

added as new claims.

3.   Claims 1-43 are pending and presented for examination.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-43 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

6.   Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibamiya et

al. (U. S. Pat. No. 4,956,774, hereinafter Shibamiya) in view of Al-Chalabi (U. S. Pat. No.

5,754,493).

       As per claims 1 and 11, Shibamiya teaches a database method optimizer using most

frequency values statistics for statistical matching (See col.5, lines 3-7). Similarly, the method

taught by Shibamiya comprising the steps of: receiving a request for data associated with a

requested hierarchical data list (See col.4, lines 35-63, and col.5, lines 11-14); searching at least

one object store having at least one stored hierarchical data list (See col.2, lines 34-50, and

col.25, line 52 through col.26, line 10) for data that matches the data associated with the

requested hierarchical data list (See Col.1, lines 48-50, col.2, lines 34-38, and col.5, lines 3-7);

determining whether the at least stored hierarchical data list satisfies the request (See col.6, lines

8-15, col.26, lines 11-47, and col.27, line 60 through col.28, line 2). Shibamiya does not teach a

method wherein the request includes a predetermined tolerance and predetermined units; and

generating a first statistical curve from data values derived from the requested data and the

predetermined tolerance.

However, Al-Chalabi an analysis of velocity data with generation of function providing

variation of seismic (See the Title and the abstract) including the feature wherein the request

includes a predetermined tolerance and predetermined units (See col.9, line 45 through col.10,

line 14); and generating a first statistical curve from data values derived from the requested data

and the predetermined tolerance (See Figs10 and 11 and corresponding text, " these figs show

the generation of a first, a second and a third curves").

.   It would have been obvious for one ordinary skill in the art at the time of the Applicant's

invention was made to modify the teachings of Shibamiya with the teachings of Al-Chalabi

because Al-Chalabi provides a system using mathematical formulas that require maximum

tolerance value information as input, wherein each point in the maximum tolerance value

corresponds to a function that fits an observed curve, the interpretation of the value forming the

curve corresponds to statistical information which determine a statistical curve.

As per claims 21 and 31, the claims have substantially the same limitations as claim 1 and 11. These limitations have already been addressed in the rejection of claims 1 and 11. Therefore they are rejected on similar grounds corresponding to the arguments given for rejected claims 1 and 11 above.

As per claims 2, 12, 22, and 32, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention, further comprising the step of generating a second statistical curve for the at least one store hierarchical data list (See Al-Chalabi's Figs 10 and 11).

As per claims 3, 13, 23, and 33, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, wherein the step of determining whether the at least one stored hierarchical data list satisfies the request comprises determining an overlap of the first statistical curve and the second statistical curve (See Al-Chalabi's col.10, line 7 through col.11, line 4).

As per claims 4, 14, 24, and 34, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, further comprising the step of converting the predetermined units to other units (See Shibamiya's col.29, lines 9-32).

As per claims 5, 15, 25, and 35, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, further comprising the step of presenting the second hierarchical data list that satisfies the request (See Shibamiya's col.26, lines 11-47, and col.27, line 60 through col.28, line 2).

As per claims 6, 16, 26, and 36, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, further comprising the step of presenting a match result notification (See Shibamiya's col.2, lines 34-38, and col.5, lines 3-5).

As per claims 7, 17, 27, and 37, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, further comprising the step of presenting a non-match result notification (See Shibamiya's col.29, lines 60-67).

As per claims 8, 18, 28, and 38, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, further comprising the step of indicating a closeness of the second hierarchical data list satisfying the request (See Shibamiya's col.5, lines 3-7, col.6, lines 8-15, and col.26, lines 11-33). Shibamiya shows by the percentage frequencies of occurrence how close is the matching that satisfies the request query.

As per claims 9, 19, 29, and 39, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, wherein the statistical curve is based on a normal distribution (See Shibamiya's Abstract, lines 10-13, col.16, lines 61-62, and col.25, lines 20-65).

As per claims 10, 20, 30, and 40, the combination of Shibamiya and Al-Chalabi, as modified, teaches the claimed invention limitations, wherein the predetermined tolerance is set by a system administrator (See Al-Chalabi's col.9, line 66 through col.10, line 6, the tolerance of set of values forming the curves assuming entering by a human operator).

As per claims 41, 42, and 43, the claims have substantially the same limitations as claim 1 and 11. These limitations have already been addressed in the rejection of claims 1 and 11. In addition claims 41 and 42 include the step of generating a second curve which also teaches by Al-Chalabi (See Al-Chalabi's Figs. 10 and 11 and corresponding text) and claim 43 the step of determining an overlap amount of the first curve and the second curve which also teaches by Al-Chalabi (See Al-Chalabi's col.10, line 7 through col.11, line 4). Therefore they are rejected on similar grounds corresponding to the arguments given for rejected claims 1 and 11 above.

Conclusion

7.   **Any response to this action should be mail to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 746-7239 (for formal communication intended for entry)

Or:

(703) 746-7240 (for informal of draft communications, please label

"PROPOSED" or "DRAFT")

Hand - delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington.

VA, Fourth Floor Lobby (Receptionist Telephone No. (703) 305-3900).

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (703) 305-7094. The examiner can normally be reached Monday through Friday from 9:30 AM to 4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703) 305-3830. The fax phone number for this group is (703) 308-5403.

CHARLES RONES
PRIMARY EXAMINER

Jacques Veillard
Patent Examiner TC 2100

March 3, 2004